practical, on frangibly mounted structures of the lowest practical height, with the frangible point no higher than 3 inches above grade.

(c) FAA Advisory Circulars contain methods and procedures for the configuration and maintenance of safety areas acceptable to the Administrator.

§139.311 Marking, signs, and lighting.

- (a) *Marking*. Each certificate holder must provide and maintain marking systems for air carrier operations on the airport that are authorized by the Administrator and consist of at least the following:
- (1) Runway markings meeting the specifications for takeoff and landing minimums for each runway.
 - (2) A taxiway centerline.
- (3) Taxiway edge markings, as appropriate.
 - (4) Holding position markings.
- (5) Instrument landing system (ILS) critical area markings.
- (b) Signs. (1) Each certificate holder must provide and maintain sign systems for air carrier operations on the airport that are authorized by the Administrator and consist of at least the following:
- (i) Signs identifying taxiing routes on the movement area.
- (ii) Holding position signs.
- (iii) Instrument landing system (ILS) critical area signs.
- (2) Unless otherwise authorized by the Administrator, the signs required by paragraph (b)(1) of this section must be internally illuminated at each Class I, II, and IV airport.
- (3) Unless otherwise authorized by the Administrator, the signs required by paragraphs (b)(1)(ii) and (b)(1)(iii) of this section must be internally illuminated at each Class III airport.
- (c) Lighting. Each certificate holder must provide and maintain lighting systems for air carrier operations when the airport is open at night, during conditions below visual flight rules (VFR) minimums, or in Alaska, during periods in which a prominent unlighted object cannot be seen from a distance of 3 statute miles or the sun is more than six degrees below the horizon. These lighting systems must be authorized by the Administrator and consist of at least the following:

- (1) Runway lighting that meets the specifications for takeoff and landing minimums, as authorized by the Administrator, for each runway.
- (2) One of the following taxiway lighting systems:
 - (i) Centerline lights.
 - (ii) Centerline reflectors.
 - (iii) Edge lights.
 - (iv) Edge reflectors.
 - (3) An airport beacon.
- (4) Approach lighting that meets the specifications for takeoff and landing minimums, as authorized by the Administrator, for each runway, unless provided and/or maintained by an entity other than the certificate holder.
- (5) Obstruction marking and lighting, as appropriate, on each object within its authority that has been determined by the FAA to be an obstruction.
- (d) Maintenance. Each certificate holder must properly maintain each marking, sign, or lighting system installed and operated on the airport. As used in this section, to "properly maintain" includes cleaning, replacing, or repairing any faded, missing, or nonfunctional item; keeping each item unobscured and clearly visible; and ensuring that each item provides an accurate reference to the user.
- (e) Lighting interference. Each certificate holder must ensure that all lighting on the airport, including that for aprons, vehicle parking areas, roadways, fuel storage areas, and buildings, is adequately adjusted or shielded to prevent interference with air traffic control and aircraft operations.
- (f) Standards. FAA Advisory Circulars contain methods and procedures for the equipment, material, installation, and maintenance of marking, sign, and lighting systems listed in this section that are acceptable to the Administrator.
- (g) Implementation. The sign systems required under paragraph (b)(3) of this section must be implemented by each holder of a Class III Airport Operating Certificate not later than 36 consecutive calendar months after June 9, 2004.

§139.313 Snow and ice control.

(a) As determined by the Administrator, each certificate holder whose airport is located where snow and icing